

WHAT IS CLAIMED IS:

- 1 1. In a cable communication system, a method of initializing a set top box,
 2 comprising the steps of
 3 transmitting a signal on an out-of-band channel to be received by the
 4 set top box, the signal indicating an in-band service channel frequency;
 5 receiving the signal at the set top box to identify the in-band service
 6 channel frequency;
 7 receiving signals over the in-band service channel frequency to
 8 initialize the set top box; and
 9 identifying the set top box to the cable system by transmitting signals
 10 from the set top box via a return path.
- 1 2. The method of claim 1, wherein the in-band service channel frequency comprises a
 2 DOCSIS in-band channel frequency.
- 1 3. The method of claim 1, wherein the in-band service channel frequency comprises a
 2 DAVIC in-band channel frequency.
- 1 4. The method of claim 3, wherein the in-band service channel frequency is in the
 2 range of 100 MHz to 800 MHz.
- 1 5. The method of claim 1, wherein the step of transmitting a signal on an out-of-band
 2 channel includes the step of transmitting a trace and route message which includes the
 3 in-band service channel frequency parameters therein, and a flag indicating the
 4 presence of said frequency.
- 1 6. The method of claim 1, wherein the step of identifying the set top box to the cable
 2 system includes the step of transmitting UDP/IP packets.
- 1 7. The method of claim 1, further comprising the step of authorizing a digital access
 2 controller to initialize the set top box after the step of transmitting the signal on an
 3 out-of-band channel.
- 1 8. The method of claim 1, further comprising the step of authorizing a digital access
 2 controller to initialize the set top box before the step of transmitting the signal on an
 3 out-of-band channel.

1 9. The method of claim 1, further comprising the step of pre-loading application
2 software into the set top box.

1 10. The method of claim 1, wherein the step of transmitting the signal includes the
2 step of transmitting by means of a digital access controller, and further comprising the
3 step of sweeping a range of out-of-band channel frequencies with the set top box to
4 locate the signal being transmitted on the out-of-band channel by the digital access
5 controller.

1 11. In a cable communication system, including a digital access controller ("DAC"),
2 a billing system connected to the DAC, an out-of-band modulator ("OM") in
3 communication with the DAC, and a plurality of set top boxes in communication with
4 the OM, the improvement comprising:

5 a trace and route message containing an in-band service channel
6 frequency and other service channel parameters, the message being
7 transmittable by the DAC to the set top box via the OM; and
8 means for decoding the trace and route message at the set top box to
9 determine the in-band service channel frequency.

1 12. The system of claim 11, further comprising means for determining a return path
2 channel frequency after determining the in-band service channel frequency.

1 13. The system of claim 11, wherein the cable system utilizes DOCSIS protocols.

1 14. The system of claim 11, wherein the cable system utilizes DAVIC protocols.